SKOPETS, Z.A. (Yaroslavl'); MAIOROV, V.M. (Drezden); YAGLOM, I.M. (Moskva); DOBROKHOTOVA, M.A. (Yaroslavl')

Selected problems and theorems and special methods for their solution. Part 2. Mat. v shkole no.3:90 My-Je '63. (MIRA 16:7)

(Mathematics—Problems, exercises, etc.)

MAYOROV, V.M.

In the Scientific Council of the Far Eastern Branch of the Academy of Sciences of the U.S.S.R. Soob.DVFAN SSSR no.9: 159-160 '58. (MIRA 12:4)
(Research)

MAYOROV, V.M.

In the Far Eastern section of the Siberian branch of the Academy of Sciences of the U.S.S.R. Izv.Sib.otd.AN SSSR no.2:153 '59. (MIRA 12:7)

(Academy of Sciences of the U.S.S.R.)

MAYOROV, V.M.

In the Far Eastern Branch of the Siberian division of the Academy of Sciences of the U.S.S.R. Izv. Sib. otd. AN SSSR no.7:129-130 '59. (MIRA 12:12)
(Soviet Far East--Research)

MAYOROV, V.M.

In the Academic Council of the Far Eastern Branch of the Siberian division of the Soviet Academy of Sciences. Soob.DVFAN SSSR no.10: 273-274 '59. (MIRA 13:11)
(Soviet Far East--Degrees, Academic)

MAYOROV, V.M.

Anniversary session of the Scientific Council. Soob. DVFAN SSSR no.21:45 '63. (MIRA 18:6)

MAYOROV, V. N.

"Morphology of the Lower Mesenteric Plexus in Man and Mammals (Experimental Morphological Investigations)." Cand Med Sci, Inst of Physiology imeni I. P. Pavlov, Acad Sci USSR (Apr-Jun 54) (Vest Ak Nauk, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

USSR/Medicine - Neurophysiology FD-3393

Card 1/1 Pub. 17-17/22

Mayorov, V. N.

Author : Mayorov, V. N.

Title : Forms of connections of the lower mesenteric ganglia of humans and mammals with the central nervous system

Periodical : Byul. eksp. biol. i med. 8, 62-66, Aug 1955

Abstract : In 1953 Yu. I. Slepkov first discovered sensory nerve endings in the inferior mesenteric ganglia of man. He reported that a considerable part of the receptors found are of central origin. He did not find other forms of connections between the central nervous system and the lower mesenteric ganglia - a so-called pericellular apparatus. Author reviews much of the work done by other Russian authors in relation with his own work and discusses the illustrations accompanying his article. Presence of a degenerating end apparatus after resection of the posterior rootlets of the spinal cord leads author to believe that there exists central reception of the inferior mesenteric ganglion as well as distribution of sensory neurons in the lumbarintraspinal ganglia. 8 references, 7 USSR, 2 since 1940, micrographs.

Institution : Inst of Physiology imeni I. P. Pavlov (Dir. Acade. K. M. Bykov) Acad Sci USSR, Leningrad

Submitted " 4 March 1955

MAYOROV, V.N. (Leningrad)

Modifications of the pericellular apparatus under experimental and pathological conditions. Arkh. pat. 19 no.1:40-42 '57
(MLRA 10:4)

1. Iz Instituta fiziologii imeni I.P. Pavlova AN SSSR.
(SYNAPSES, pathology)

MAYOROV, V.N.

Method of intravital study of the nerves of the bladder in frogs [with summary in English]. Biul.eksp.biol. i med. 44 no.7:113-115 Jl '57. (MIRA 10:12)

1. Iz laboratorii morfologii (zav. laboratoriyey - chlen-korrespondent AN SSSR prof. N.G.Kolosov) Instituta fiziologii imeni I.P. Pavlova AN SSSR, Leningrad. Predstavlena akad. K.M.Bykovym.
(BLADDER, INNERVATION,
intravital study in frog (Rus))

USSR / Human and Animal Morphology - Nervous System. S

Abs Jour : Ref. Zhur. - Biol., No. 22, 1958, No. 101479

Author : Mayorov, V. N.
Inst : Academy of Sciences USSR
Title : The In Vivo Observation of Inter-Neural Connections and Receptors in the Urinary Bladder of Rana Temporaria

Orig Pub : Dokl. AN SSSR, 1957, Vol. 115, No. 4, 826-828

Abstract : Receptors and synapses of the urinary bladder were visualized microscopically in vivo following removal of the wing of the right iliac bone and introduction of the objective of the microscope into the lumen of the bladder through an incision. 3-4 minutes following injection into the blood of of a 0.25 percent solution of methylene blue, there was evidence of staining of the spiral

Card 1/2

MAYOROV, V.N.

MAYOROV, V.N.

Observation of interneuronic connection and receptors in the bladder of Rana temporaria in vivo. Dokl. AN SSSR 115 no.4:826-828 Ag '57. (MIRA 10:12)

1. Institut fiziologii im. I.P. Pavlova AN SSSR. Predstavleno akademikom K.M. Bykovym.
(FROGS) (BLADDER--INNERVATION)

MAYOROV, V.N. (Leningrad, ul.Plekhanova, d.39, kv.28)

Recent data on the structure of living and surviving neurons and synapses. Arkh.anat.,gist. i embr. 36 no.6:3-10 Je '59. (MIRA 12:9)

1. Laboratoriya morfologii (zav. - prof.N.G.Kolosov) Instituta fiziologii im. I.P.Pavlova AN SSSR.

(NEURONS, anat. & histol. (Rus))
(SYNAPSES, structure (Rus))

17(1)

AUTHOR: Mayorov, V. N. SOV/20-124-6-38/59

TITLE: Observations of Pericellular Apparatuses in vivo (Prizhiznennyye nablyudeniya nad peritsellyulyarnymi apparatami)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 6, pp 1321-1323 (USSR)

ABSTRACT: In literature accessible to him the author has not found an answer to the problem as to how a living pericellular apparatus is constructed and whether methylene blue actually colors but also at the same time changes the structure of this apparatus. This is not accidental: no one ever observed an uncolored living synapse. After a long search the author succeeded in obtaining a living histological preparation from the urinary bladder of the grass frog (Rana temporaria). The same nerve cells and pericellular apparatuses (Refs 8, 9) were distinctly visible in it without any coloring and at a state of an intact blood circulation which were described on fixed and surviving preparations (Refs 1, 15). According to requirement author colored the blood of living synapses with methylene blue. Thus one and the same synapse could be observed before and after the

Card 1/3

coloring. The facts investigated may have answered the above-mentioned questions. Between the structures of synapses colored with methylene blue and silver nitrates there are considerable differences to be observed (Figs 1 and 2). A noncolored living synapse is indeed visible but only partly (Fig 3). Numerous investigations have shown that methylene blue simultaneously colors and changes a living synapse. The disks transform immediately after pigmentation into oval or directly into globular shapes (Fig 1). Only some of them retain their original spindle shape. On pigmentation the disks grow larger. In this case they can cover the whole surface of the neuron. The actual fibers of the synapse are not changed. Thus methylene blue may be considered 1) the only coloring matter which makes a living synapse visible and 2) as a stimulating substance which changes the structure of inter-neuron bonds. Between the pericellular fibers and their disks on the one hand and the surface of the peripheral neuron on the other hand there is a close contact which is distinctly visible in the case of a living synapse.

The submerged position of the disks is not accidental apparently: it enlarges the contact surface and renders the contact closer. There are 3 figures and 17 references, 11 of which are Soviet.

ASSOCIATION: Institut fiziologii im. I. P. Pavlova Akademii nauk SSSR (Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences, USSR)

PRESENTED: October 29, 1958 by K. M. Bykov, Academician

SUBMITTED: October 25 1958

MAYOROV, V.N.

In vivo observations on interneuronic connections in the urinary bladder of the frog Rana temporaria. Izv. AN SSSR. Ser. biol. no.5: 787-791 S-O '60. (MIRA 13:9)

1. Institute of Physiology, Academy of Sciences of the U.S.S.R., Leningrad.

(BLADDER—INNERVATION)

MAYOROV, V.N. (Leningrad, tsentr.ul.Plekhanova, 39, kv.28)

Intravital observations of sensory nerve endings. Arkh. anat. gist. i embr. 38 no. 5:31-34 My '60. (MIRA 14:2)

1. Laboratoriya morfologii (zav. - chlen-korrespondent AN SSSR prof. N.G. Kolosov) Instituta fiziologii im. I.P. Pavlova AN SSSR.

(RECEPTORS (PHYSIOLOGY))

MAYOROV, V.N.

Dynamics of intravital structural changes in interneuronal connections (synapses) under experimental conditions. Trudy Inst. fiziol. 10:346-361 '62 (MIRA 17:3)

1. Laboratoriya morfologii ( zav. - N.G. Kolosov) Instituta fiziologii imeni Pavlova AN SSSR.

ARON, M.P.; BA[illegible]

Methodology for morphological and electrophysiological studies on interneuronal synapses in a living object. Fiziol. zhur. [illegible] 7: 378-380 Mr '64. (MIRA 18:1)

1. Laboratoriya obshchey fiziologii Instituta fiziologii [illegible] I.P. Pavlova AN SSSR, Leningrad.

L 25803-66

ACC NR: AP6015931 SOURCE CODE: UR/0239/65/051/003/0309/0317

23
B

AUTHOR: Bazanova, I. S.; Yevdokimov, S. A.; Mayorov, V. N.; Merkulova, O. S.; Chernigovskiy, V. N.--Chernigovski, V. N.

ORG: Laboratory of General Physiology, Institute of Physiology im. I. P. Pavlov, Leningrad (Laboratoriya obshchey fiziologii Instituta fiziologii AN SSSR)

TITLE: Morpho-electrophysiological investigation of the interneuron synapse on a living preparation of the parasympathetic ganglion of the urinary bladder of the frog

22 22

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 3, 1965, 309-317

TOPIC TAGS: electrophysiology, autonomic nervous system, experiment animal

ABSTRACT: Parallel morphological and electrophysiological study of interneuron synapses of the parasympathetic ganglion of the urinary bladder of the frog was carried out on living histological preparations at +2°. It was established that in the process of irritation of a synapse with electric currents of various frequencies, a hypotonic solution (Leningrad city water), and a solution of methylene blue, morphological and functional changes took place in the synapse. Conduction of nerve impulses through the synapse was retained in all stages of morphological change, although it was altered in magnitude and type. The morphological

Card 1/2 UDC: 612.815

2

L 25803-66
ACC NR: AP6015931

and structural changes (which involved enlargement of the synapse contact plates) as well as the functional changes were reversible. The structural changes lagged behind the functional shifts both during their development and regression. The dynamics of stages of the structural changes observed were similar to those of stages of paranecrosis. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 19Nov63 / ORIG REF: 011 / OTH REF: 002

Card 2/2

BAZANOVA, I.S.; YEVDOKIMOV, S.A.; MAYOROV, V.N.; MERKULOVA, O.S.; CHERNIGOVSKIY, V.N.

Morphological and bioelectrical changes in the interneuronal synapsis during the transmission of rhythmical impulses. Fiziol. zhur. 51 no.4:457-462 Ap '65. (MIRA 18:6)

1. Laboratoriya obshchey fiziologii Instituta fiziologii imeni Pavlova AN SSSR, Leningrad.

IONTOV, A.S., doktor med. nauk, otv. red.; MAYOROV, V.N., kand. med. nauk, otv. red.

[Morphology of the tracts and connections of the central nervous system] Morfologiia putey i sviazei tsentral'noi nervnoi sistemy. Moskva, Nauka, 1965. 144 p.
(MIRA 19:1)

1. Akademiya nauk SSSR. Institut fiziologii im. I.P.Pavlova.

ARKAD'YEVSKIY, A.A.; MAYOROV, V.P.; RUMYANTSEV, G.I.

Methodological problems in the measurement and evaluation of vibrations and noise. Uch. zap. Mosk.nauch-issl.inst. san.i gig. no.7:17-25 '60. (MIRA 15:2)

(NOISE--MEASUREMENT) (VIBRATION--MEASUREMENT)

1. MAYOROV, V.S.; OSIPOV,N.V.

2. USSR (600)

4. Wine and Wine Making

7. Wine industry needs precise instructions and direction in chemical and microbiological control. Vin.SSSR 12 no.10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

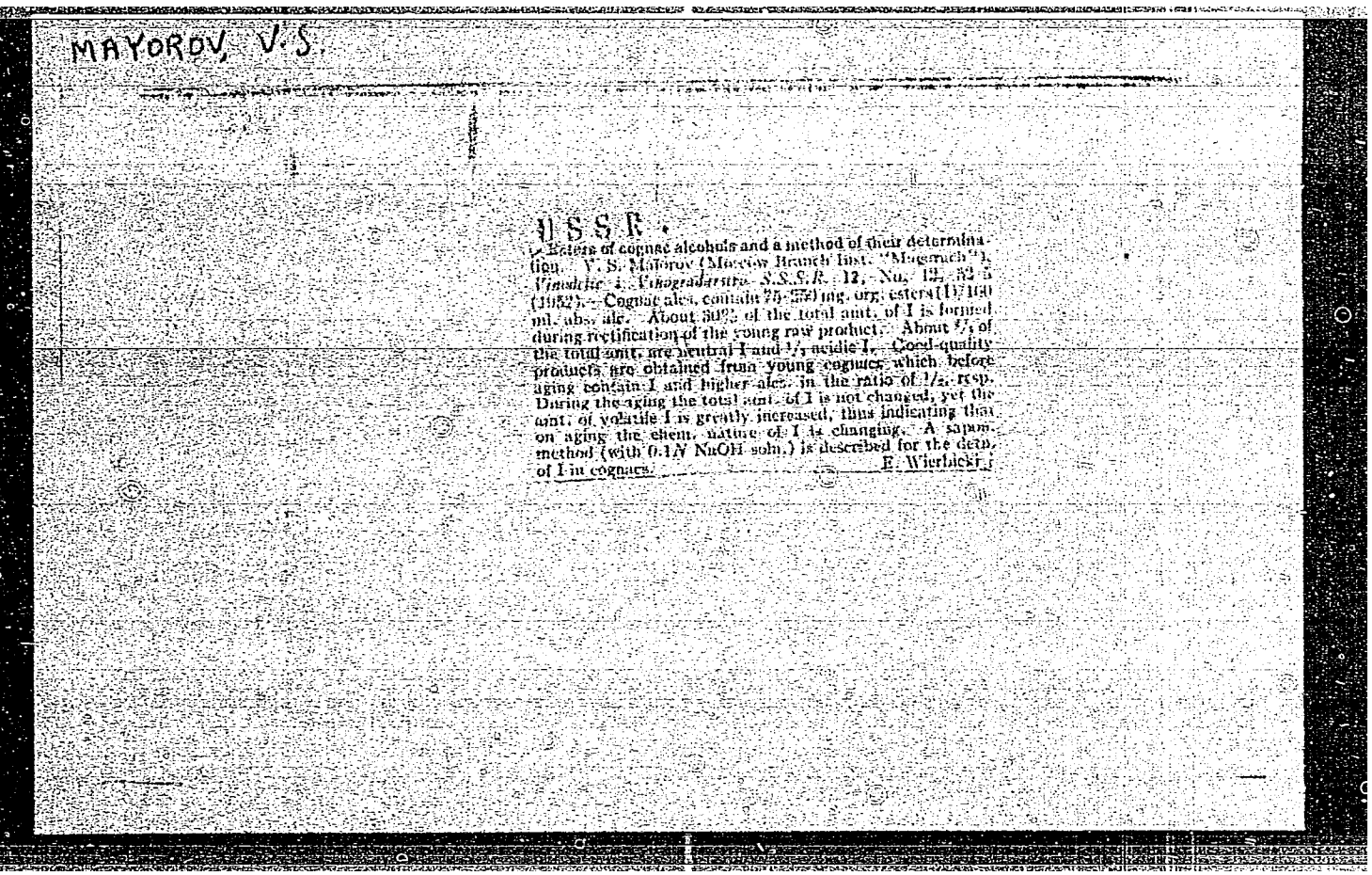
1. MAYOROV, V.S.

2. USSR (600)

4. Brandy

7. Esters of brandy and how they are analyzed. , Vin.SSSR , 12, No.12, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.



MAYOROV, V. S.

USSR

Esters of cognac alcohols and a method of their determination. V. S. Mayorov (Moscow Branch Inst. "Magarach"). *Vinodelie i Vinogradarstvo S.S.S.R.* 12, No. 12, 32-5 (1952).—Cognac alcs. contain 75–85 mg. org. esters (I) per 100 ml. abs. alc. About 50% of the total amt. of I is formed during rectification of the young raw product. About ⅓ of the total amt. are neutral I and ⅔ acidic I. Good-quality products are obtained from young cognacs which before aging contain I and higher alcs. in the ratio of ½. resp. During the aging the total amt. of I is not changed, yet the amt. of volatile I is greatly increased, thus indicating that on aging the chem. nature of I is changing. A saponification method (with 0.1*N* NaOH soln.) is described for the detn. of I in cognacs. E. Wierbicki

MAYOROV, V. S.

The causes of spoilage of the champagne upon remuage. N. F. Sacuko and V. S. Maiorov (Moscow Branch Inst. "Magarach"). *Vinodelie i Vinogradarstvo S.S.S.R.* 16, No. 5, 11-17(1956).—It was found that the structure of the ppt. plays an important role in the process of champagne production and is related to the correct ratio between the tannin and glue. Conditions and causes of good and bad ppt. formation are discussed and exptl. analyses are tabulated. M. Charnagdarian

MAYOROV, V.S

Methyl alcohol content of cognac alcohol and grape vodka. V. S. Mayorov (Moscow Branch Inst., "Magarach"). *Vinodelie i Vinogradarstvo S.S.S.R.* 16, No. 7, 22-6(1956).—Plant tissue constituents, such as pectic substances, lignin, and amino acids, were discussed as possible sources of MeOH found in cognac alc. and wine vodka. The technological aspects of the production of grape alcs. and their effect on the MeOH content were studied. The concn. of MeOH varied and depended upon several factors, especially the distn. process. The highest concn. of MeOH, which was over 3 vol. % in one instance, was found in the final distillate fraction. This was caused by the hydrolysis of OCH$_3$ groups from the grape residue. Redistn. of the crude alc. reduced the MeOH content in wine alc. to less than 0.1 vol. %. This concn. meets U.S.S.R. purity requirements.

R. A. McComb

USSR / Microbiology. Technical Microbiology. F-3

Abs Jour: Ref Zhur-Biol., No 16, 1958, 72021.

Author : Sayenko, N. F.; Mayorov, V. S.
Inst : All-Union Scientific-Research Institute of Viniculture and Viticulture.
Title : Factors Influencing the Formation of Yeast Deposit Structures in the Champagne Aging Process.

Orig Pub: Byul. nauchno-tekhn. inform. Vses. n.-i. in-t vinodeliya i vinogradarstva, 1957, No 1, 24-29.

Abstract: Along with physical and chemical reasons for the formation of yeast deposits with undesirable properties for champagne production (adhesion, formation of coatings and networks), reasons of a biological character are noted: influence of products of wild yeasts and yeast-like organisms

Card 1/2

MAYOROV, V.S.

Content of methanol and other ingredients in grape alcohols and grape vodkas. Trudy VNIIViV "Magarach" 9:185-203 '60.
(MIRA 13:11)

1. Moskovskiy filial Vsesoyuznyy nauchno-issledovatel'skogo instituta vinodeliya i vinogradarstva "Magarach".
(Liquors) (Methyl alcohol)

MAYOROV, V. S.

Cand Tech Sci - (diss) "Study of the technological-chemical processes of producing grape alcohols and vodkas for the purpose of decrease their methanol content." Moscow, 1961. 16 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Technological Inst of Food Industry); 150 copies; price not given; list of author's works on p 16 (10 entries); (KL, 10-61 sup, 216)

ALEKSEYEV, Petr Alekseyevich, kand. tekhn. nauk; MOISEYEVA, Nataliya Andreyevna, kand. tekhn. nauk; MAYOROV, V.S., kand. tekhn. nauk, nauchnyy red.; KAPLUN, M.S., red.; MAMONTOVA, N.N., tekhn. red.

[Use of refrigeration in the manufacture of grape wine and concentrated juices] Primenenie kholoda v proizvodstve vinogradnykh vin i kontsentrirovannykh sokov. Moskva, Gostorgizdat, 1962. 47 p. (MIRA 15:4)
(Refrigeration and refrigerating machinery)
(Fruit juices)

DRBOGLAV, Ye.S.; MAYOROV, V.S.; LIPOVICH, L.M.

Desulfurization of fruit and berry juices by means of ultrasonic waves. Trudy TSentr.nauch.-issl.inst.piv., bezalk.i vin.prom. no.11:59-60 '63. (MIRA 17:9)

MAYOROV, V.S.; SHASHILOVA, V.P.; MATASOVA, N.N.

Use of the nat[illegible] food coloring matter from grape pulp in the production of fruit and berry wine. Trudy TSentr.nauch.-issl. inst.piv., bezalk. i vin. prom.no.11:61-66 '63. (MIRA 17:9)

DENSHCHIKOV, Mikhail Tikhonovich, kand.tekhn.nauk; SILIN, P.M., prof., red.; VESELOV, I.Ya., prof., red.; SMIRNOV, V.A., prof., red.; RZHEKHIN, V.P., red.; LEBEDEV, P.P., Red.; KOVALENKO, Yu.T., red.; KUPCHINSKIY, P.D., red.; BENIN, G.S., red.; P'YANKOV, A.G., red.; SHNAYDMAN, L.O., red.; MOREV, N.Ye., red.; SHMAIN, M.M., red.; BULGAKOV, N.I., red.; MAYOROV, N.S., red.; TERNOVSKIY, N.S., red.; RAZUVAYEV, N.I., red.; OGORODNIKOV, S.T., red.; BURMAN, M.Ye., red.; KHOLOSTOV, V.A., red.; NAMESTNIKOV, A.F., red.; NASAKIN, T.N., red.; KOVALEVSKAYA, A.I., red.; KISINA, Ye.I., tekhn. red.

[Wastes from the food industry and their utilization] Otkhody pishchevoi promyshlennosti i ikh ispol'zovanie. Izd. 2., dop. i perer. Moskva, Pishchepromizdat, 1963. 615 p. (MIRA 16:6)
(Food industry--By-products)

MAYOROV, V.V., inzh.

The PB-80 bog plow. Trakt. i sel'khozmash. no.1:37-38 Ja '59.
(MIRA 12:1)

1. Tayezhnaya mashinoispytatel'naya stantsiya.
(Plows)

KAPLAN, B.L.; MAYOROV, V.V.

Studying certain parameters of surface explosions as applied to seismic prospecting. Razved. i prom. geofiz. no.28:22-30 '59.
(MIRA 13:1)
(Prospecting--Geophysical methods)

KAPLAN, B.L.; MAYOROV, V.V.

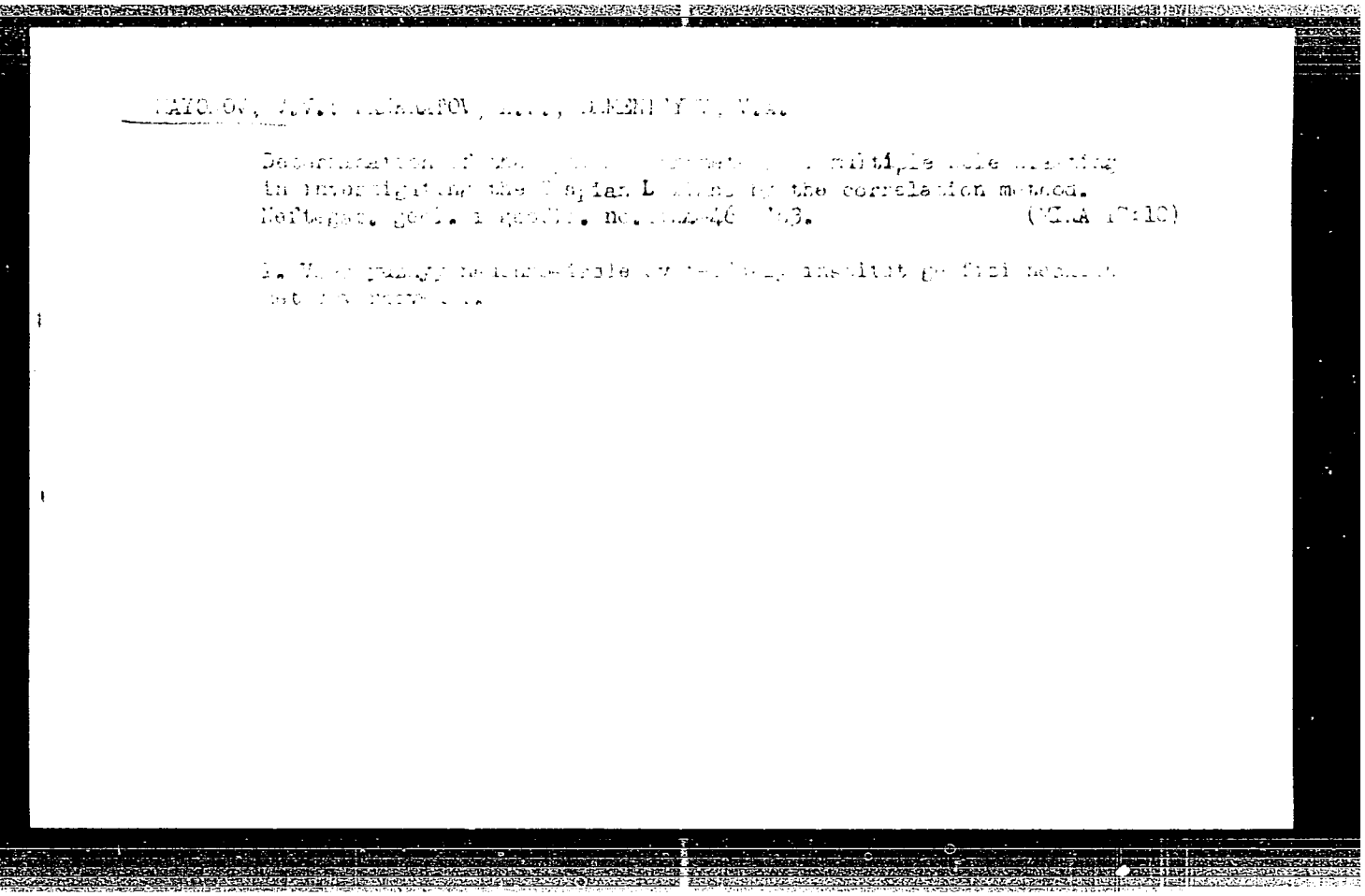
Generation of transverse waves by directed explosions. Razved. i prom. geofiz. no.36:14-23 '60. (MIRA 13:12)
(Seismic prospecting)

MAYOROV, V.V.; KAPLAN, B.L.; ZOLOTAREV, P.P.

Approximate method for calculating inter-charge distances in group explosions. Izv. AN Turk. SSR. Ser. fiz.-tekh., khim. i geol. nauk no.4:56-61 '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.

(Explosions)



MAYOROV, V.V.

Selection of distances between grouped charges. Razved. i prom. geofiz. no.47:46-50 '63. (MIRA 16:8)
(Blasting) (Seismic prospecting)

MAYOROV, V.V.; KAPLAN, B.L.; DEMENT'YEV, V.A.

Effect of the distances between grouped charges on the amplitude and frequency spectrum of the signal recorded during blasting. Razved. i prom. geofiz. no.47:51-58 '63. (MIRA 16:8)
(Blasting) (Seismic prospecting)

ACC NR: AM6033432 (A) Monograph UR/

Lovlya, Sergey Aleksandrovich; Kaplan, Berta L'vovna; Mayorov, Viktor Vasil'yevich; Kupalov-YAropolk, Igor' Konstantinovich

Blasting; blasting operations in prospecting geophysics (Vzryvnoye delo; vzryvnyye raboty v razvedochnoy geofizike) Moscow, Izd-vo "Nedra," 1966. 204 p. illus., biblio. Errata slip inserted. 4500 copies printed. Textbook for students of geophysics at petroleum institutes.

TOPIC TAGS: geophysics, geophysical prospecting, blasting operation, shock wave

PURPOSE AND COVERAGE: This book is intended for students of geophysical institutes for studies of oil exploration; it may also be useful to engineers-geophysicists. The authors outline the fundamental principles of the theory of explosive materials and of the effect of explosions in a medium. The blasting methods used in seismic prospecting are analyzed and the techniques of operations and the explosives used are described. The authors also describe methods and apparatus for the use of explosives in eliminating borehole stoppages and the removal of strata.

Card 1/2 UDC: 622.235(071.1)

ACC NR: AM6033432

TABLE OF CONTENTS [abridged]:



SUB CODE: 08, 11/ SUBM DATE: 05May66/ ORIG REF: 008/

Card 2/2

MAYOROV, Ya., general-mayor; VAZHENTSEV, I., polkovnik; GAVRILENKO, I., polkovnik; GOL'DMAN, G., polkovnik; MEL'NIKOV, N., polkovnik

Creatively study scientific communism. Komm. Vooruzh. Sil 46 no.19:58-61 O '65. (MIRA 18:12)

ALIKHASHKIN, A.; GORCHEV, I.; MAYOROV, Ye.

Highly efficient calculating machines in the service of economists. Fin.SSSR 37 no.2:58-61 F '63. (MIRA 16:2)
(Punched card systems—Budget)

L 18451-66 EWT(m)/EWP(w)/ETC(m)-6 IJP(c) WW/EM

ACC NR: AP6002561 SOURCE CODE: UR/0286/65/000/023/0057/0057

AUTHORS: Gusarov, A. A.; Gorshkova, I. N.; Mayorov, Ye. G.

ORG: none

TITLE: Device for signaling the unbalance of rotating bodies. Class 42, No. 176712 [announced by Scientific Research Institute of Chemical Machine Construction (Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 57

TOPIC TAGS: turbine rotor, compressor rotor, laboratory instrument

ABSTRACT: This Author Certificate presents a device for signaling the unbalance of rotating bodies, e.g., a rotor, which consists of a detector placed on the body, power units connected to the detector, a control relay, and signal lamps. To determine the direction of deflection of the rotor under the action of nonequilibrium centrifugal forces, the detector is in the form of an annular cavity partially filled with a conducting liquid (see Fig. 1). A number of contacts are mounted

Card 1/2 UDC: 62-251.783.2

L 18451-66

ACC NR: AP6002561

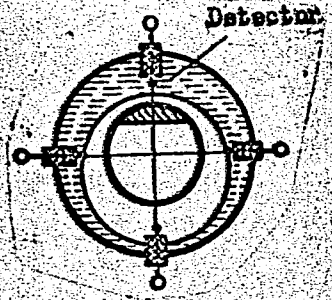



Fig. 1

radially in the cavity at an angle to each other. Orig. art. has: 1 diagram.

SUB CODE: 13/ SUBM DATE: 19Feb65

Card 2/2 MJS

ALIKHASHKIN, Aleksandr Il'ich; GORCHEV, Ivan Ivanovich; MAYOROV, Yevgeniy Semenovich; MEDVEDEVA, R., red.

[Mechanization of planning and accounting work in financial organs] Mekhanizatsiia planovo-uchetnykh rabot v finansovykh organakh. Moskva, Izd-vo "Finansy," 1964. 92 p. (MIRA 17:8)

MAYOROV, Ye.S.

Fiber-plastic control pedal for carburetor throttles. Avt. prom. 31 no.1:37-38 Ja '64. (MIRA 18:3)

1. Likinskiy avtobusnyy zavod.

M. Y. [illegible]

[illegible]mental investigations in selecting the efficient design of drilling bits for the SVB-2 machine in drilling shafts in [illegible]sk Basin openworks. Sbor. KuzNIUI no.10:143-150 '64.
(MIRA 18:9)

MATOROVA, A.A., assistent.

An unusual case of stillbirth as a result of aneurysm of the umbilical cord. Akush. i gin. 34 no.6:100-101 N-D '58. (MIRA 12:1)

1. Iz kliniki akusherstva i ginekologii pediatricheskogo fakul'teta (zav. kafedroy-prof. M.A. Dannakhiy) Saratovskogo meditsinskogo institu-ta.

(STILLBIRTH
caused by aneurysm of blood vessel of umbilical cord (Rus))
(UMBILICUS CORD,
blood vessel aneurysm causing stillbirth (Rus))

TKACHEVA, K.S.; MAYOROVA, A.A.; LOGVINOVICH, D.N.

Biology and fisheries of the bonito in the Black Sea. Trudy Azchernirò no.18:101-117 '60. (MIRA 14:10)
(Black Sea—Bonito)

5(2) SOV/80-32-4-41/47

AUTHORS: Lebedinskiy, V.V., Shenderetskaya, Ye.V. and Mayorova, A.G.

TITLE: The Preparation of Spectrally Pure Rhodium (Polucheniye spektral'no-chistogo rodiya)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 4, pp 928-929 (USSR)

ABSTRACT: To obtain chemically pure rhodium metal, the triammine-trichloride method proposed by V.V. Lebedinskiy has been extensively used. The product obtained by this method, although corresponding to a grade of chemically pure, still does not meet high purity requirements for manufacturing certain physical devices. In order to remove the remaining impurities, the authors propose to apply the sulfite method which they describe in detail. The essence of this method consists in the dissolving of rhodium triammine-trichloride in the boiling solution of the ammonium sulfite which results in the formation of the sulfite compound of rhodium, $(NH_4)_3[Rh(SO_3)_3]$. By a series of subsequent operations and by roasting, rhodium metal is obtained, in which

Card 1/2

even traces of impurities, such as Pt, Pd, Ir, Cu and Fe, are not detected by spectral analysis.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR (Institute of General and Inorganic Chemistry imeni N.S. Kurnakov of the AS USSR)

SUBMITTED: November 17, 1958

~~65938~~ 69538

S/078/60/005/05/13/037
B004/B016

5.2620

AUTHORS: Chernyayev, I. I., Mayorova, A. G.

TITLE: Complex Compounds of Rhodium With Thiosulfate and Ethylene Diamine

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol.5, No. 5, pp. 1074-1084

TEXT: The authors describe mixed thiosulfate-ammonia compounds of rhodium which are formed in the presence of ethylene diamine (En). These are polymeric complexes in which an $S_2O_3$ group forms the bridge. Here, En plays a stabilizing role, inhibits the reduction, and thus permits the isolation of these complex compounds from the solution. The reaction of $(NH_4)_3RhCl_6 \cdot H_2O$ with $Na_2S_2O_3 \cdot 5H_2O$ and En was investigated. The authors obtained the compound $[Rh_4 13S_2O_3 \cdot 2NaS_2O_3 \cdot 8En]Na_{10}(NH_4)_6 \cdot 11.5H_2O$. The water content of this compound was determined according to Yelitsur. The analysis made by E. Ye. Burova confirmed the homogeneity of this substance. When boiling a solution of this compound a cleavage occurred after 5-20 min to give $[Rh_2 6S_2O_3 \cdot NaS_2O_3 \cdot 4En]Na_4(NH_4)_3 \cdot 3H_2O$, and after 1 h the monomer $[Rh 3S_2O_3 \cdot 2En]Na_2(NH_4)_3 \cdot 3 \cdot 5H_2O$ resulted. The tetramer is cleft by ammonia to form the dimer. By reaction of $Rh 3NH_3Cl_3$ with $Na_2S_2O_3 \cdot 5H_2O$ and En the dimer

Card 1/2

~~65938~~ 69538

Complex Compounds of Rhodium With Thiosulfate and Ethylene Diamine

S/078/60/005/05/13/037
B004/B016

$[Rh_2 7S_2O_3 \cdot 4En]Na_8$ was obtained which is split in aqueous and ammoniacal solution to give the monomer $[Rh3S_2O_3 \cdot 2En]Na_3$. The authors discuss the structures of these compounds which were identified by determining their electrical conductivity, molecular weight, pH, potentiometric titration, and magnetic susceptibility. Similar to the sulfite group also the thiosulfate group enters the inner sphere as $NaS_2O_3$. The authors refer to D. I. Ryabchikov and A. P. Isakova (Ref. 1).

There are 8 references, 7 of which are Soviet.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

SUBMITTED: November 3, 1959

Card 2/2

5.2620

S/078/60/005/06/04/030
B004/B014

AUTHORS: Chernyayev, I. I., Mayorova, A. G.

TITLE: Thiosulfate Complex Compounds of Rhodium With Ammonia

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 6, pp. 1208 - 1220

TEXT: The authors of the present paper wanted to study ammonia compounds in order to clarify the composition of the previously prepared (Ref. 1) complex compounds of rhodium with thiosulfate and ethylene diamine. They obtained the following experimental results: Interaction between $(NH_4)RhCl_6 \cdot H_2O$ and $Na_2S_2O_3 \cdot 5H_2O + NH_4OH$ yields the tetrameric compound $[Rh_4 \cdot 13S_2O_3 \cdot 2NaS_2O_3 \cdot 12NH_3] \cdot Na_{14}(NH_4)_2$, which contains four additional ammonia molecules in its internal sphere, or the compound $[Rh_4 \cdot 13S_2O_3 \cdot 2NaS_2O_3 \cdot 10NH_3]Na_{12}(NH_4)_2 \cdot 2 \cdot 5H_2O$ without excess ammonia. When these compounds are heated, they decompose into the monomer $[Rh3S_2O_32NH_3]Na_3$. In this process, the dimer $[Rh_26S_2O_3NaS_2O_36NH_3]Na_6(NH_4)$

Card 1/3

which has two additional $NH_3$ molecules in its internal sphere, forms as intermediate of the first-mentioned tetramer with excess ammonia content. This dimer enters into reaction with ammonia and forms the compound $[Rh_2 5S_2O_3 6NH_3]Na_4 \cdot 3H_2O$. Interaction between $[Rh_2 3NH_3Cl_3]$ and $Na_2S_2O_3 \cdot 5H_2O$ + $NH_4OH$ yields the dimer $[Rh_2 7S_2O_3 6NH_3]Na_8$ which is split off by boiling into the monomer $[Rh3S_2O_3 2NH_3]Na_3$. In an ammoniacal medium this splitting takes place under simultaneous reaction with $NH_4OH$ and formation of the compound $[Rh3S_2O_3 3NH_3]Na_3$. The compound $[Rh3S_2O_3 2NH_3]Na_3$ does not react with KI. Iodine does not enter the internal sphere, nor is the sodium of the external sphere replaced by potassium. The experiments performed are described, structural schemes are suggested, and analytical and physical data are given. The authors refer to a paper by V. V. Lebedinskiy and Ye. V. Shenderetskaya (Ref. 2). There are 2 Soviet references.

Thiosulfate Ammonia Complex Compounds of Rhodium With S/078/60/005/06/04/030 B004/B014

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR) 1

SUBMITTED: November 3, 1959

Card 3/3

AVTOKRATOVA, T.D.; ANDRIANOVA, O.N.; BABAYEVA, A.V.; BELOVA, V.I.; GOLOVNYA, V.A.; DERBISHER, G.V.; MAYOROVA, A.G.; MURAVEYSKAYA, G.S.; NAZAROVA, L.A.; NOVOZHENYUK, Z.M.; ORLOVA, V.S.; USHAKOVA, N.I.; FEDOROV, I.A.; FILIMONOVA, V.N.; SHENDERETSKAYA, Ye.V.; SHUBOCHKINA, Ye.F.; KHANANOVA, E.Ya.; CHERNYAYEV, I.I., akademik, otv. red.

[Synthesis of complex compounds of platinum group metals; a handbook] Sintez kompleksnykh soedinenii metallov platinovoi gruppy; spravochnik. Moskva, Izd-vo "Nauka," 1964. 338 p. (MIRA 17:5)

1. Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii. 2. Institut obshchey i neorganicheskoy khimii AN SSSR (for all except Chernyayev).

CHERNYAYEV, I.I.; SHENDERETSKAYA, Ye.V.; MAYOROVA, A.G.; KORYAGINA, A.A.

Rhodium formate compounds. Zhur. neorg. khim. 10 no.2: 537-579 F '65. (MIRA 18:11)

1. Submitted July 20, 1964.

MAYOROVA, A. M.

MAYOROVA, A. M. "On the problem of the etiology of tetanus", Trudy Voronezhsk. gos. med. in-ta, Vol. XVIII, 1949, p. 70-75.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

MAYOROVA, A. M.

MAYOROVA, A. M. "On the clinical treatment of brain tuberculosis", Trudy Vorosheniov. gos. med. inta, Vol. XVIII, 1949, p. 128-32.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

USSR

CATEGORY : Cultivated Plants. Grains. Leguminous Grains. Tropical Cereals.

ABS. JOUR : Ref Zhur-Biologiya No. 5, 1959, No. 20235

AUTHOR : Chernyy, V.A.; Mayorova, A.R.

INST. : Sakhalin Complex Sci.Res.Inst.of the AS USSR

TITLE : The Action of Mineral Fertilizers and Effect of Sowing Norms on the Oat Yield and Resistance to Lodging (Culm Strength).

ORIG. PUB.: Soobshch. Sakhalinsk. kompleksn. n.-i. in-ta AN SSSR, 1957, vyp. 5, 112-117

ABSTRACT : Oats is the basic forage grain crop in Sakhalin; a reduction in its output in certain years has been associated with lodging, which causes great grain losses in harvesting. To produce high oat yields and increase its resistance to lodging it is expedient to grow the crop with a background of phosphate-potash fertilizers with small doses of N, applied before sowing. Boosting the sowing rates above 140 kg/ha did not increase the

CARD: 1/2

GORELIK, B.M.; BUKHINA, M.F.; KAPSHTYK, V.I.; RATNER, A.V.; MAYOROVA, A.S.

Rubber sealing rings. Standartizatsiia 25 no.3:49-50 Mr '61. (MIRA 14:3)

(Gaskets—Standards)

ZHEREBKOV, S.K.; MAYOROVA, A.S.; GROZHAN, Ye.M.; KONDORSKAYA, V.A.

Using rubber and ebonite for the protection of equipment from the action of chemical media. Standartizatsiia 26 no.2:37-38 F '62. (MIRA 15:2)
(Rubber coatings)

PETROCHENKO, P.F.; SHAPIRO, I.I.; LUR'YE, G.B., prof.; DAYON, A.Ye., inzh.; ZAKHARKIN, V.I., inzh.; MAYOROVA, A.V., inzh.; FELIKSON, N.I., inzh.; FILIPPOVA, L.A., inzh.; GVOZDEVA, A.N., inzh.; MODEL', B.I., tekhn.red.

[General norms for cutting conditions and time in the machinery industry for technical normalization of machining on grinding machines; large-lot and mass prcduction] Obshchemshinostroitel'nye normativy rezhimov rezaniia i vremeni dlia tekhnicheskogo normirovaniia rabct na shlifoval'nykh stankakh; krupnoseriinoe i massovoe proizvodstvo. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 359 p. (MIRA 13:1)

1. Moscow. Nauchno-issledovatel'skiy institut truda. TSentral'noye byuro promyshlennykh normativov po trudu. 2. Glavnyy inzhener TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Petrochenko). 3. Zaveduyushchiy otdelom mashinostroyeniya TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issled.institute truda (for Shapiro). 4. Sotrudniki TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Dayon, Zakharkin, Mayorova, Felikson, Filippova, Gvozdeva).
(Grinding and polishing)

PETROCHENKO, P.F.; SHAPIRO, I.I.; LUR'YE, G.B., prof.; DAYON, A.Ye., inzh.; ZAKHARKIN, V.I., inzh.; MAYOROVA, A.V., inzh.; FELIKSON, N.I., inzh.; FILIPPOVA, L.A., inzh.; GVOZDEVA, A.N., inzh.; DOBRITSYNA, R.I., tekhn.red.

[General engineering time norms for the technical standardization of machining processes on grinding machines; small-lot and piece production] Obshchemashinostroitel'nye normativy vremeni dlia tekhnicheskogo normirovaniia rabot na shlifoval'nykh stankakh; melkoseriinoe i edinichnoe proizvodstvo. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1960. 38 p.

(MIRA 14:1)

1. Moscow. Nauchno-issledovatel'skiy institut truda. TSentral'noye byuro promyshlennykh normativov po trudu. 2. Glavnyy inzhener TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Petrochenko). 3. Zaveduyushchiy otdelom mashinostroyeniya TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Shapiro). 4. TSentral'noye byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institut truda (for Dayon, Zakharkin, Mayorova, Felikson, Filippova, Gvozdeva).

(Grinding and polishing)

PORT, B.S.; VORONENKO, L.M.; Prinimali uchastiye: IVANOV, L.I.; MAYOROVA, A.V.; PETROV, B.M.

Some problems of the improvement of the design and manufacture of press molds for tread vulcanization. Kauch. i rez. 23 no.10: 44-46 O '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut po oborudovaniyu dlya shinnoy promyshlennosti, g. Yaroslavl'.

MAYOROVA, B.I.

MIRSAGATOVA, R.S.; MAYOROVA, B.I.

Some characteristics of the clinical course of the postnatal period in infants. Pediatriia no.3:23-28 My-Je '54. (MLRA 8:1)

1. Iz Khar'kovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i mladenchestva im. N.K.Krupskoy (direktor A.I.Kornilova) na baze 7-go rodil'nogo doma gorzdravotdela (glavnyy vrach I.T.TSvetkov)

(INFANTS (NEWBORN)) (BLOOD--EXAMINATION)

MIRSAGATOVA, R.S., starshiy nauchnyy sotrudnik; MAYOROVA, B.I., ordinator 7-go rodil'nogo doma

Transfusion of erythrocytes in isosensibilized newborn infants. Vop.okh.mat. i det. 1 no.3:13-15 My-Je '56. (MLRA 9:9)

1. Iz Kar'kovskogo nauchno-issledovatel'skogo instituta imeni N.K.Krupskoy (dir. - kandidat meditsinskikh nauk A.I.Kornilova, nauchnyy rukovoditel' - prof. V.I.Konstantinov)
(INFANTS (NEWBORN)--DISEASES)
(BLOOD--TRANSFUSION)
(ERYTHROCYTES)

LOBANOVSKAYA, L.I.; MAYOROVA, B.O.; MIRSAGATOVA, R.S.; YURCHENKO, M.Z.; YAKOVLEVA, M.Ya.; YANKELEVICH, D.Ye.

Diabetes mellitus and pregnancy. Trudy Ukr.nauch.-issl.inst. eksper.endok. 18:141-174 '61. (MIRA 16:1)
(DIABETES) (PREGNANCY, COMPLICATIONS OF)

MAYOROVA, E., inzh.-tekhnolog

Nonmetallic materials in machine-tool manufacture. Tekh. est. no.3:16-18 Mr '65. (MIRA 18:6)

1. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov.

MAYOROVA, E. A. Cand. Tech. Sci.

Dissertation: "Changes in the Properties of Leather Under Various Conditions as Characteristics of Its Stability in Long-Time Storage." Moscow Technological Inst of Light Industry imeni L. M. Kaganovich, 27 Nov 47.

SO: Vechernyaya Moskva, Nov, 1947 (Project #17836)

SOV/121-58-10-11/25

AUTHOR: Mayorova, E.A.

TITLE: Selection of Plastics for the Manufacture of Typical Machine Tool Components (Vybor plasticheskikh mass dlya izgotovleniya tipovykh detaley stankov)

PERIODICAL: Stanki i Instrument, 1958, Nr 10, pp 29-32 (USSR)

ABSTRACT: Several plastic moulding compositions were tested for their suitability to make machine tool components for tropical uses. Table 1 lists the mechanical and physical properties of different compositions, namely FKPN/50 (obtained by mixing phenol formaldehyde resins with synthetic rubber of the acrylic nitryl and of the styrol types) recommended for components with high mechanical and insulating properties, "Phenolit" and "Decorrosit" (obtained by mixing phenol formaldehyde resins with polyvinyl chloride using hydrophobic organic and mineral fillers) recommended for high mechanical thermal and corrosive properties ("Decorrosit" resists alkaline solutions) and OFPM-296 (phenol-oxazolidine powder) recommended for cast components with inserts. The moulding process is given in Table 2 for each of the compositions. Swelling tests in distilled water,

Card 1/2

Selection of Plastics for the Manufacture of Typical Machine Tool Components

a 0.02% alkaline emulsion, mineral oil, paraffin and "sulphofresol" cutting liquid at a temperature of 25°C were continued for 1000 hours. The swelling of the different compositions after 24, 72, 200, 500 and 1000 hours is listed in tables 3-6. Table 8 shows the change in weight of "Decorrosit". Table 7 shows the change of the electrical properties of the different compositions after immersion in water for 1000 hours. The effect of the addition of fungicides is shown to be small in FKPM-15, Phenolit and Decorrosit. Tests with ultra-violet radiation have shown little effect. Creep tests under a transverse bending load were carried out indicating a high initial creep in FKPM-15. There are 3 illustrations including 2 graphs and 9 tables.

S/121/59/000/12/003/003

AUTHORS: Mayorova, E.A., Lapidus, A.S.

TITLE: Thinly Laminated Glue-on Plastic Guides

PERIODICAL: Stanki i Instrument, 1959, No 12, pp 23 - 25

TEXT: The authors state that plastic guides for heavy machinery hitherto were made with a thickness of 10 mm and were fastened by screws or pins. The use of glue-on type plastic guide strips makes it possible to reduce this thickness, and the authors recommend for machine tools of medium size a thickness of plastic guide strips of 2 - 4 mm, and for heavy machines a thickness of 3 - 5 mm. The material recommended is the PT grade textolite (or PT-1), although at present industrial tests with thinly laminated guides made of cord caprone and 68-polyamide are carried out. Compared with thick plastic guide strips, the thinner ones have the following advantages: 1) the consumption of deficient plastics is greatly reduced (by 2 - 4 times); 2) labor-consumption in the manufacture of plastic guides decreases; 3) layer deformations of the plastic material are considerably reduced, which ensures a high stability of the plastic layer; 4) the rigidity of machine body parts is somewhat in-

Card 1/2

creased, which is important for tables and slides, generally not rigid enough. The authors emphasize the great importance of selecting the proper glue, which must possess a high shearing strength, warrant an increased impact strength of the glue seam and have a high resistance to mineral oils, organic solvents, aqueous coolants, high relative air moisture and temperatures in the range of 80 - 100°C. The authors cite the results of investigations which were carried out at the ENIMS (Experimental Scientific Research Institute of Metal Cutting Machine Tools) in order to test the properties of various glue compounds, among others the epoxide resin glues ED-5, ED-6 and the K-168 compound. The holding power of the glues was tested for the following materials: cast iron with steel textolite, polyamides, vinyl plastics, cord fibres, Br.OTsS 6-6-3 grade bronze, TsAM 10-5 grade zinc alloy, and L62 grade brass. The results of these tests are cited in the Tables 1, 2 and 3. Based on the investigations carried out by the ENIMS, instructions for the glueing of plastic guide strips were worked out which, since 1957, were subjected to extensive checks in machine tool plants and machine building factories.
Three diagrams, 3 tables.



APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001033110012-9"

S/080/60/033/008/010/013
A003/A001

AUTHOR: Mayorova, E.A.

TITLE: The Problem of the Stability of the Properties of Some Plastics

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 8, pp. 1862-1867

TEXT: The stability of plastics in coolants, mineral oils, organic solvents, etc, was determined by measuring the changes of their linear dimensions and their weight. The experiments were made with П-68 (P-68), АК-7 (AK-7) and П-54 (P-54) polyamides, polycaprolactam, cord caprone and (PT) textolite. It was shown that the highest water absorption was observed in the first days. The size and weight change more quickly in water at 50°C than at 20°C. Saturation sets in after 2 weeks and a month, respectively. The limits of the increase in size and weight in water at 20 and 50°C are the following: the diameter of samples of PT textolite and P-68 polyamide increases by 0.7%, that of caprone, cord caprone and AK-7 polyamide by 2.5%; the thickness of samples of PT textolite increases by 3%; the weight of P-68 samples increases up to 4%, of PT textolite by 7%, caprone, cord caprone and AK-7 by 8.5-9%; the diameter of samples of polyamide 54 increases in water at 20°C by 2.6%, the weight by 12.5%, at 50°C cracks appear. In cooling

Card 1/2

S/080/60/033/008/010/013
A003/A001

The Problem of the Stability of the Properties of Some Plastics

liquids containing soda and triethanolamine the values observed are the same as in water. In oil at 20°C the sizes of the samples increase only slightly. The diameter of samples of PT textolite increases by 0.07% and in polyamides less than 0.05%. In oil at 70°C the sizes and the weight of all samples decreases. Samples of PT textolite decrease by 0.1% in diameter, polyamide 54 by 0.8%, in other polyamides by 0.5%. It was shown that polyamide P-68 and cord caprone can be used for the manufacture of machine tool parts. There are 8 figures and 1 table.

ASSOCIATION: Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov (Experimental Scientific Research Institute of Metal-Cutting Machines)

SUBMITTED: September 17, 1959

Card 2/2

S/121/61/000/004/007/008
D040/D113

AUTHORS: Vladimirova, L.V., and Mayorova, E.A.

TITLE: Nonmetallic protection materials for machine tool ways

PERIODICAL: Stanki i instrument, no. 4, 1961, 34-36

TEXT: Results are given of materials' tests conducted in search for substitutes for cardboard, synthetic leather and 65Г (65G) band steel used for the protection of machine tool bed ways. Substitutes are required since cardboard and "dermatin" (synthetic leather) are susceptible to water and cutting fluids, and 65G steel is subject to cracking. Tests were carried out at the chemical laboratory of ENIMS together with the machine-tool laboratory of the Moskovskiy zavod shlifoval'nykh stankov (Moscow Grinding Machine Plant). The tested substitutes were as follows: a polyvinyl chloride plastic of the Vladimirskiy khimicheskiy zavod (Vladimir Chemical Plant) produced per standard БТУ МХП 2024-49 (VTU MKhP 2024-49) specification, sheet polyethylene of the Okhtenskiy khimkombinat (Okhta Chemical Combine), synthetic leather of the Kalininskiy "IK" zavod (Kalinin "IK" Plant),

Card 1/2

rubberized fabric of the zavod "Kauchuk" ("Kauchuk" Plant) and tentative compounds with combinations of different resins for a base. The experimental specimens of the materials were prepared by the NII plenochnykh materialov i iskusstvennoy kozhi (NII of Film Materials and Artificial Leather). Materials which passed chemical tests for resistance to all possible cutting fluids, humidity, and fatigue resistance in bending, were further tested on a stand. The test results are given in two tables and show the mechanical properties and weight changes of materials after testing for 45 days. Bands of polyvinyl chloride reliably protected machine ways from dirt without any volumetric changes or traces of destruction. It was concluded that the best substitutes for 65G steel are polyvinyl chloride plastic (per VTU MKhP 2024-49), polyvinyl chloride combined with nitryl rubber, and polyethylene. There is 1 figure and 2 tables.

S/121/61/000/008/001/006
D041/D113

AUTHORS: Gladkov, B.A.; Mayorova, E.A.; Shilkin, O.D.; Shiferson, M.M.

TITLE: The use of plastics for manufacturing large-size components of machine-tools

PERIODICAL: Stanki i instrument, no. 8, 1961, 1-4

TEXT: The article describes experimental investigations carried out with plastics in order to determine the extent to which they may be used for manufacturing large-size components of metal cutting machine-tools. These components can be manufactured by casting or by contact molding, the latter producing better mechanical properties in the components. The hardness of large-size components manufactured by the casting method can be raised by improving the properties of the binding and fiber fillers. As glass fibers in the form of cloth etc. can be used as fillers, the use of glass plastics for making lathe components was considered. Since there was practically no data on the stability of glass plastics, their swelling-up and creep characteristics were investigated in detail. The swelling-up of the specimens was tested in water-cooling liquids and mineral oil at a high relative hu-

Card 1/4

The use of plastics...

midity (95±5%) and temperature (50±5°C). The creep characteristics were investigated by loading the specimens so as to produce bending, i.e. by applying a concentrated force to the center of the specimen which was placed on two supports. Plastic specimens obtained by contact molding from ПН-1 (PN-1) polyester gum and Т (T) glass cloth, and by hot pressing from КАСТ В (KAST V) glass textolite, АГ-4С (AG-4S) glass plastics and RA glass textolite (CSR brand), were tested. The creep of plastics made of epoxy resin and a metal filler by mold casting, was also investigated. The specimens were covered either by a protective layer or by "924" nitro-enamel. They were weighed on an analytical balance with an accuracy of up to 0.0004 g. The following results were obtained: KAST V glass textolite showed the largest change in weight (1.26%), the saturation point being reached after 19 days; glass plastics made of PN-1 polyester gum showed a weight increase of 0.6% and did not attain the saturation point after 83 days; AG-4S glass plastics had the least change in weight (0.19% after 83 days), and RA glass textolite attained a maximum water absorption (0.77%) after 6 days. Tests in the humidity chamber showed that KAST V glass textolite had the largest humidity absorption, while AG-4S and glass plastics obtained by contact

molding showed the lowest hygroscopicity. The nitro-enamel layer did not protect the specimens from humidity and the oil cooling liquids. Linear changes in the plastics depended on the medium in which they were placed, on the method of their manufacture, on their machining, and on the type and quantity of the binding agent. Cooling liquids and a high relative air humidity reduced the mechanical properties by 1.5-2 times. Creep tests were carried out at room temperatures using the ПК-2 (PK-2) device designed by ENIMS. This device permitted deformations during bending at constant load to be measured. KAST V glass textolite served as a reference specimen. The results show that AG-4S and RA have the lowest creep, while cast specimens of epoxy resins with a metal filler have the highest (15-20 times higher than the reference specimen's creep at a bending stress of 100-200 kG/cm$^2$), and cannot be used for making high-duty components of metal-cutting machine-tools. It is concluded that glass plastics can be used only for large-size machine-tool components. ENIMS and NIIP have manufactured a series of large-size components for the 1K62 (1K62) screw-cutting lathe in order to validate the obtained results. The zavod "Stankokonstruktsiya" ("Stanko-konstruktsiya" Plant) has manufactured the following parts for the 1K62

S/121/61/000/008/001/006
D041/D113

The use of plastics...

lathe from glass plastics: front and rear legs, rear leg inserts, tray, gearbox and feeding box covers, and housings. Test runs gave good results. There are 4 figures.

Card 4/4

AYZENSHTADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.; KRIMER, T.Ye.; KASHEPAV, M.Ya., kand. tekhn. nauk; MERPERT, M.P., kand. tekhn. nauk; KOPERBAKH, B.L.; CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN, B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.; MUSHTAYEV, A.F.; OGNEV, N.N.; PALEY, M.B., kand. tekhn. nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk;MECHETNER, B.Kh.;SOSENKO,A.B;AVDULOV, A.N.; LEVIN, A.A., kand.tekhn. nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A., kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn. nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof., doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, R.I., red.; CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L., tekhn. red.

[Machine-tool industry in capitalist countries] Stanko-stroenie v kapitalisticheskikh stranakh. Pod red. i s predisl. A.P.Vladzievskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii mashinostroyeniya. 2. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov (for Vladziyevskiy, Belogur-Yasnovskaya, Chigareva, Asval'dov, Kogan).

(Machine-tool industry)

MAYOROVA, E.A.

Plastic coating of machine-tool parts. Stan.i instr. 33
no.6:25-27 Je '62. (MIRA 15:7)
(Plastic spraying)

MAYOROVA, E.A.; SHILKIN, O.D.; VASIL'YEV, V.A.; SHILOVA, Ye.A.

Plastic gears for jig-boring machines. Stan.i instr. 33 no.9:10-14 S '62. (MIRA 15:9)

(Drilling and boring machinery)

ANNENBERG, E.A.; MAYOROVA, E.A.; SOKHOR, I.M.

Film materials for expansion bellows-type guards. Stan.i instr. 33 no.11:35-38 N '62. (MIRA 15:11)
(Machine tools--Safety appliances)

MAYOROVA, E.A.; SHILOVA, Ye.A.; SHILKIN, O.D.; IL'INA T.S.

Molding gear wheels of caprolan. Stan. i instr. 35 no.6:
23-25 Je '64 (MIRA 17:8)

L 21646-66 EWT(d)/EWT(m)/EWP(v)/EWP(j) T/EWP(l) RM/WW
ACC NR: AP6006548 (A) SOURCE CODE: UR/0191/65/000/011/0061/0064

50
B

AUTHORS: Mayorova, E. A.; Ovchinnikova, T. V.

ORG: none

TITLE: A two-stage method for gluing polyamides to metals

SOURCE: Plasticheskiye massy, no. 11, 1965, 61-64

TOPIC TAGS: polyamide, glue, shear strength, resin, teflon, adhesion, cast iron, epoxy plastic, glass textolite

ABSTRACT: The use of solutions of polyamides in solvents containing alcohol and water for gluing polyamides is discussed. These solutions show a higher adhesion to polyamides than cements based on epoxy resins. Methods for preparing the metal surfaces are discussed. In the experiment, the following cements were used as the base layer: BF-2, FL-4, F7-T, F-9, RAF-15, FRAM-30, PU-2, phenol-polyamides PFE-2/10, PEM-2, 548, MPF-1, polyamide S-6 with formic acid, epoxy resin 69, and low-molecular polyamides. The metal surfaces were etched to a smoothness of ~2. The test results were compared with the shearing-strength indices of cemented cast iron-textolite and cast iron-capron joints. The cemented specimens were also tested

UDC: 678.675:678.029.42

Card 1/2

L 21646-66

ACC NR: AP6006548

after up to 200 days in a 5% oil emulsion, in mineral oil, and in a humidity chamber at 95 ± 5% relative humidity and a temperature of 50 ± 5C (see Fig. 1).

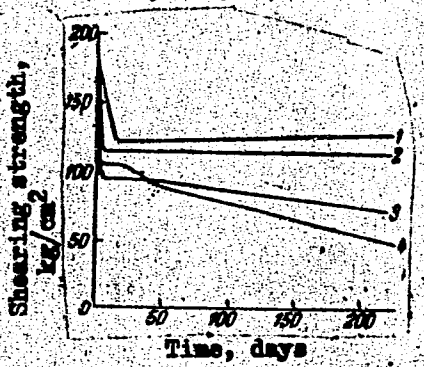



Fig. 1. Strength of cemented iron-capron joints with base layer of FL-4 as a function of medium: 1 - industrial oil 45 at 20C; 2 - ditto, at 50C; 3 - humidity chamber (φ = 95 ± 5% at 50 ± 5C); 4 - oil emulsion at 20C.

The strength of iron-to-polyamide joints and the adhesion of epoxy resin to polyamides can be increased when the surface of the polyamide is precovered with FL-4 cement. Orig. art. has: 1 figure, 1 graph, and 1 table.

SUB CODE: 11,13 SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001

Card 2/2

LAPIDUS, A.S.; MAYOROVA, E.A.

Superimposed capron guides for machine tools. Stan. i instr. 36 no.10:19-23 O '65. (MIRA 18:11)

MAYOROVA, F.S.

Production of fodder yeasts in Kazakhstan. Gidroliz.i lesokhim.prom. 13 no.6:28-29 '60. (MIRA 13:9)

1. Gosudarstvennyy nauchno-tekhnicheskiy komitet.
(Kazakhstan—Yeast)

MAYOROVA, G. F.

"Disinfection of Surfaces Infedted With Tuberculosis Bacilli." Cand Med Sci, Acad Med Sci USSR, Moscow, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

MUROMTSEV, S. N.[deceased]; GINDIN, A. P.; ANOSOV, I. Ya.; MAYOROVA, G. F.; BORODIYUK, N. A.

Morphological characteristics of the reaction of the body to inhalation immunization with bacterial antigens. Report No. 1: Morphological characteristics of pulmonary reactions to inhalation revaccination with diphtheria antitoxin and whooping cough vaccine. Zhur. mikrobiol., epid. i immun. 32 no.8:7-12 Ag '61. (MIRA 15:7)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(DIPHTHERIA) (WHOOPING COUGH) (LUNGS) (IMMUNITY)